In the American tropics a small cyclone was encountered on the 21st,. near 19° N., 131° W., by the American steamer *Oak Park*. The lowest pressure observed by the vessel was 29.49 inches, highest wind-force, 8. Nothing further is known of the movements of the cyclone.

A full-fledged hurricane raged up the Mexican west coast from the 5th until the 9th. It probably originated near 10° N., 97° W., moved northwestward, and was last heard from near 19° N., 110° W. Several vessels met this storm, but most of them encountered moderate gales and depressions only. Two steamers, the British M. S. *Reginolite*, Capt. F. A. Germain, master and observer, from San Pedro to Balboa, and the American tank steamer *Coalinga*, Capt. N. E. Larson, Mr. S. Lindholm, second officer, Iquique to Los Angeles, experienced heavier winds and seas, and the *Coalinga* battled for hours in a full hurricane, lowest observed pressure 28.90 inches, at 8 p. m. of the 8th, near 17° N., 104° W. This vessel met with strong westerly winds as early as the 3d, when in 6° 26′ N., 94° 33′ W. These continued during the 5th, increasing at times to force 7. On the 6th, in 13° 42′ N., 102° 07′ W., the wind-force rose to 10, the direction changing from SW. and NW. to NE., and barometer down to 29.56. On the 7th the storm became more violent, the winds at times rising to force 12, with blinding rain. From then until 8 a. m. of the 9th hurricane winds predominated. Quoting from the observer:

> Due to numerous changes in the direction and force of the wind, the storm appeared to be of a somewhat freaky nature. We judged it to be moving in a NW. direction at a lower speed than the ship. We had apparently reached the center of the storm on the evening of July 8, when the ship was hove to on an SE. course. The *Coalinga* was in ballast and in good trim, and sustained no serious damage, except to bridge, lifeboats, and gear. It may be of interest to note that during two days before the storm reached its greatest force a number of sea birds in exhausted condition took shelter on board the ship.

The following is quoted from the report of Captain Germain, of the *Reginolite:*

> The storm broke at 10 a. m., July 8, the ship than being in lat. 18° 35′ N., long. 104° 20′ W., and continued with increasing violence until midnight, gradually decreasing during the morning of the 9th and dying away at noon.
>
> During the forenoon of the 8th weather reports were exchanged between all vessels in radio communication, and from the information thus secured, the center of the storm was roughly estimated, at noon, to be located in lat. 16° 30′ N., long. 104° W., and to be traveling in a WNW'ly direction. This position is only approximate, however, as barometric readings could be obtained only on one side of the disturbance. It would be interesting to know how this estimate compares with the actual position.
>
> It will be noted that no meteorological information was exchanged between ships until the storm had actually broken. If the ships concerned had done this earlier, much more general information might have been available.
>
> It would be to the general advantage of all vessels trading on eastern Pacific Ocean routes, if daily exchanges of weather reports could be instituted. Valuable information of probable weather changes would be at the mariners' disposal, and warnings of approaching cyclonic disturbances would be available in sufficient time for definite steps to be taken to avoid the storm center.

Along the western two-thirds of the northern steamer routes fog was frequent, particularly south of the westernmost part of the Aleutian chain, where it occurred on about 60 per cent of the days. Between west longitudes 130° and 150° the phenomenon was little observed, but along the American coast from Vancouver to San Diego it was reported as occurring frequently. On the 22d and 23d fog was observed in a somewhat out-of-the-way place for its occurrence, namely, in 19° N., 125° to 130° W.

TYPHOONS AND DEPRESSIONS

FOUR TYPHOONS IN THE PHILIPPINES IN JULY, 1926

By Rev. José Coronas, S. J.

[Weather Bureau, Manila, P. I.]

There were four typhoons in the Philippines during the last month of July, one having passed between Luzon and the Visayas, another across northern Luzon, and the other two across the Balintang Channel.

The first one was an intense but very small typhoon, with a radius of no more than 30 miles. It entered Samar during the night of the 3d to the 4th; traversed Masbate in the morning of the same day, and Romblon in the afternoon. It caused considerable damage but only in a very limited number of towns near the center. The lowest barometric reading recorded in our stations was that of Calbayog 746.03 mm. (29.37 inches) at 6 a. m. of July 4.

The second typhoon was shown by our weather maps on July 13 over the Pacific about 200 miles to the east of Samar. It moved first NW. by W., and then WNW. while crossing northern Luzon in the evening and night of the 15th. Although it was a well developed typhoon while passing northeast of Catanduanes on the 14th, it traversed Luzon in the form of only a shallow depression of little importance. It caused considerable damage in in the provinces of southeastern Luzon by heavy rains and consequent floods. The depression or typhoon inclined to the north in the China Sea passing practically over Pratas in the morning of the 17th. From Pratas to the China coast it moved almost to the north.

On the 19th, when the center was already over China north of Hongkong, a disastrous electric and rain storm took place in the English colony, almost unprecedented in the history of south China. It was reported by the United Press that 20 inches of rain had fallen in seven hours, many buildings having been wrecked and several lives lost.

The third typhoon was probably formed on the 17th to 18th over the Pacific 500 or 600 miles east of northern Luzon. It seems to have moved almost due west until the afternoon of the 19th when the center was about 200 miles east of northern Luzon. Then it moved NNW., but only for less than one day. After 10 a. m. of the 20th the typhoon took a WNW. direction and traversed the Balintang Channel about half way between Aparri and Basco during the night of the 19th to 20th. The center passed close to the south of Hongkong in the morning of the 22d.

The barometric minima recorded in Aparri and Basco were 747.87 mm. (29.44 inches) and 747.97 mm. (29.45 inches), respectively.

The last typhoon of the month was so small that it hardly influenced the weather of the Philippines, except in the Batanes Islands and the northernmost part of Luzon. It was probably formed about 150 miles east of northern Luzon on the 29th, and took a NW. and NNW. direction passing through the eastern part of Balintang Channel in the morning of the 30th and very close to the Batanes Islands at about 6 or 7 p. m. of the same day. The center was over Formosa in the afternoon of 31st. The lowest barometric minimum recorded in Basco, Batanes Islands, was 750.76 mm. (29.56 inches).